Psychology 1 (PSYL08001)
TUTORIAL and LAB WORKBOOK
(Semester 2)
2014-2015

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__________________________________________

Your Tutor’s Name:

__________________________________________

Tutor contact:

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Introduction
This workbook will tell you everything you need to do in Psychology 1 in addition to attending the lectures and writing the essays, as described in the electronic course handbook, to be found at:

http://www.psy.ed.ac.uk/psy_students/undergraduate/course_handbooks.php

You will write in this workbook. You will need to take it to tutorials and to labs to get marks! Keep it safe! If you need to replace it, download it from the handbooks url above.

If you take Psychology 2 in Year 2, it will be useful to re-read the introductory statistics explanations and exercises you carried out in this workbook.

There are three aspects to the tutorial section of Psychology 1. These are:

- Formal tutorial sessions (one per fortnight, starting Week 2 for some tutorial groups)
- Online study skills sessions (four per semester)
- Labs (four per semester)

N.B. Tutorial and lab participation together make up 12% of your overall mark for Psychology 1.

About the tutorials
The tutorials will:
- Complement the lectures
- Help students meet each other and learn to discuss things together
- Help students develop their understanding of psychological research
- Help students develop and apply generic study skills in psychology
- Equip students with specific skills required for future studies in psychology

About the labs
The labs will:
- Complement the lectures
- Help students meet each other and learn to cooperate and discuss issues
- Help students understand the real complexity of the behaviours that psychologists research
- Give students hands-on experience with techniques that make such behaviours tractable
- Introduce some of the relevant statistical concepts that let psychologists interpret data
- Introduce some of the relevant calculations and ways of presenting data from experiments

Formal Tutorial Sessions
Each of the 4 main lecture blocks of Semester 2 will have one tutorial. Each tutorial will be based around a key reading and discussion question(s) set by the lecturer for that block.

You will find a guide to reading and analysing research papers in Appendix 1 of this workbook.

To gain marks for tutorial participation you MUST read the allocated article for the tutorial, and write your responses to the papers in your hard-copy tutorial workbook. This preparation before the tutorial will equip you to participate in the tutorial discussion. If you do not bring the short, handwritten summaries to the tutorial, you will not be awarded the half-mark for participating in that tutorial. Emailing a summary after the tutorial has taken place will not result in you being awarded this mark; you must bring the answers with you to the tutorial.

The topics, readings, and preparatory questions for the tutorials are listed on the following pages. You can typically find articles using Google Scholar (when you are logged on via the university’s computer network) and download a .pdf. Or we will supply the reading on Learn. For book chapters you may need to use the libraries.
Semester 2 Tutorials

1. Language and Thinking Tutorial


TO BE COMPLETED AS TUTORIAL PREPARATION:

1. What was the independent variable in this study?

2. What was the dependent variable?

3. What was the sample size?

4. In your own words describe the main aims, methodology and conclusions of the paper (150 words):
Q5. Discuss what you think the implications of the article are. How could the conclusions be applied in the real world? What further research needs to be done in this area to aid our understanding? (150 words).
DISCUSSION QUESTIONS (relating to the tutorial reading):

1. What does this paper suggest about the effects of early language experience on speech perception?

2. Is it useful to be exposed to a second language early in childhood, even if that language appears to be “forgotten”?

3. In what ways might people be affected by knowledge of which they are not aware?

FURTHER DISCUSSION QUESTIONS (relating to lectures):

1. To what extent are all spoken languages “basically the same”? What is “universal” in spoken languages (if anything)?

2. To what extent are all written languages “basically the same”? Should we expect more similarities in (1) or in (2)? Why might that be?

3. To what extent might we be “genetically programmed for language”? How could this have come about?

4. What else is there in “language” other than that which you would hear over a ‘phone? Are those things really “language”?

5. Can we really study language processing in isolation from invoking everything else we understand about the world?

6. If you could have grown up without any human linguistic contact at all, ever, would you have any “language”? What would it be good for?

Space for your notes taken during the tutorial:
2. Perception Tutorial


Students should read Chapter 5 (‘The Mind's Eye’). Specifically, you should at least read up to the end of the ‘Deep Eye’ section of Chapter 5, but preferably the whole chapter.

TO BE COMPLETED AS TUTORIAL PREPARATION:
Q1. In your own words describe three different points that the author makes anywhere in the chapter (150 words):
Q2. Describe *three* things that non-psychologists might erroneously believe about how we see things. You can take these from the chapter or from your own experience (150 words):
DISCUSSION QUESTIONS (relating to the tutorial reading):

1. Why are psychologists so interested in illusions?

2. Would you be more impressed by a computer model of vision that did or didn't fall for illusions?

3. In principle, how different could your visual processing be to that of the person sitting next to you?

FURTHER DISCUSSION QUESTIONS (relating to lectures):

1. How might your vision be different to that of a dog or an eagle?

2. If you grew up raised by apes in the jungle, with no human contact at all, would your vision be any different from what it is now?

3. To what extent is human vision “basically the same” in all cultures?

4. Can we understand vision without understanding how and why we move in the world?

5. Can artists tell psychologists more about vision, or vice versa?

6. The eye can be likened to a camera, but in what way does human visual processing differ from that in a camera?

Space for your notes taken during the tutorial:
3. Psychology of Memory tutorial

READING A:

READING B:

TO BE COMPLETED AS TUTORIAL PREPARATION:
Read both articles but only use Reading B to complete the following questions.

Q1. In your own words describe the main aims, methodology and conclusions of the paper (150 words)
Q2. Discuss what you think the implications of the article are. How could the conclusions be applied in the real world? What further research needs to be done in this area to aid our understanding? (150 words).
DISCUSSION QUESTIONS (relating to the tutorial reading)

1. How has research on memory helped us to understand the causes of memory errors in eyewitness testimony?

2. What are the main changes in memory as people get older?

FURTHER DISCUSSION QUESTIONS (relating to lectures):

1. Can you list the different types of memory that have been discussed in the lectures?

2. Why is it useful to have theories for different types of memory?

3. Why is it useful to study what people remember, rather than what they forget?

4. Is “memory” really separate from “attention”, “perception”, “problem-solving”, “consciousness”, “cognition”, “emotion”, “planning”, and so on? If so, how?

5. Is “memory” the same for you as for the Pirahan people (a small remote tribe of hunter-gatherers in the Amazon jungle)?

Space for your notes taken during the tutorial:
4. Developmental Psychology Tutorial


TO BE COMPLETED AS TUTORIAL PREPARATION:
Q1. In your own words describe the main aims, methodology and conclusions of the paper (150 words):
Q2. Discuss what you think the implications of the article are. What further research could be done in this area to aid our understanding? (150 words):
DISCUSSION QUESTIONS (relating to the tutorial reading)

1. How strong are these results as evidence that 15 month-old children have a theory of mind?

2. Can you think of any factors other than understanding the mental state of others that might account for the reported results?

3. As you might imagine, the results in this paper caused a great deal of interest in the developmental psychology community. (a) How does the ability to understand the beliefs of others fit with what we think we know about the cognitive capabilities of 15 month-old children? That is, does the ability seem to follow from 15 month-old children’s abilities in other cognitive tasks, or seem at odds with performance on other cognitive tasks?

FURTHER DISCUSSION QUESTIONS (relating to lectures):

1. What aspects of development are “genetically pre-programmed”?

2. Does the infant have a first-person/subjective point of view? Was it always there?

3. Can child development tell us anything about species development? Does “ontogeny recapitulate phylogeny” for the things that psychologists are interested in?

4. Is senility in any sense the “mirror image” of infant development?

5. In what ways might child development be the same across all cultures? In what ways might it be different?

Space for your notes taken during the tutorial:
Psychology Labs

You are expected to participate in all four Psychology labs each semester (detailed below). This will involve you working alone or in small groups to carry out the tasks that are planned for each lab session. You will be assigned a lab time that fits with your timetable. Be sure to turn up promptly for the start of the lab; the Teaching Coordinator and two or three other helpers will be there to put you into groups and tell you what to do. There will be about 50 of you in each lab session, but you will be working in small groups typically. Sometimes you will need to share tasks out in the group, with different people doing different things, but you will all fill out the written parts of this workbook for the lab.

Bring this Tutorial & Lab Workbook with you! And a pen! You will need to fill in answers to questions in order to get a mark for participating in the lab. Before you leave the lab, the Teaching Coordinator will confirm you have been given the mark for participating in that lab.

The labs are each explained below, but they will often be complemented by materials and instructions presented on Learn.

To remind you, each lab will:
- Complement the lectures
- Help you meet each other and learn to cooperate and discuss issues
- Help you understand the real complexity of the behaviours that psychologists research
- Give you hands-on experience with techniques that make such behaviours theoretically tractable
- Introduce some of the relevant statistical concepts that let psychologists interpret data
- Introduce some of the relevant calculations and ways of presenting data from experiments

The labs are intended to be completed during the double-session (50 mins + 50 mins) of the lab, but you are free to get together afterwards with other students to finish off (or look again at) any written aspect of the lab.
Semester 2:
1. Language and Thinking lab
For this lab you will undertake a number of small experiments to give you some idea of the complexities of real speech, both in listening to it and in producing it, and some of the issues in problem solving.

Join a small group and cooperate to get answers for the following tasks.

(a) Speech is complex
Listen to a short recording of some real, typical conversational speech on Learn on one of the computers in the lab, either over headphones or from the computer’s loudspeaker. Try and write down, below, what is being said:

Your transcription:

Speech transcribing is very hard work, as you’ll have observed. Sometimes you need to hear things several times. Sometimes you need to write down part-words or nonspeech sounds.

Speech researchers call such conversational speech “fast speech”, in contrast to carefully enunciated speech recorded in optimal conditions.

Discuss with your group which type of speech we should be using as stimulus materials in laboratory experiments on speech comprehension. Would the conclusions from experiments on one type of speech necessarily generalize to experiments using the other type? If not, why not?

(Space for some answers):
(b) Perhaps a computer could do it easily?
The last couple of decades have seen a lot of progress in getting computers to recognize speech. Use the Apple Dictate program on the Macs to try this. Open “Pages” (Apple’s word processor). Double-click the “fn” at the bottom-left of the keyboard. Speak to the computer. How accurately does it transcribe your English speech? Write down below what different aspects of your performance caused it problems:

The picture on the left is a screenshot from the BBC, welcoming the Chinese Year of the Horse. Why is it that a computer, like the one used by the BBC to generate its subtitles, could make this mistake, but a person really would not? What other information might the person be relying on? Discuss with your group.

(Space for some answers):

(c) Phonoaesthetic effects
Think of the words you know connected with the functions of the nose – all the things you do with your nose. Make a list. Do you notice any similarities between them? What might be going on? Is there any way this might be “useful” in language processing?

Nose words:

Try again with words connected with light-reflectance or light-emitting words.

Light words:
Try again for words connected with gloopiness/wetness. Can you find a similar-sounding set of words?

**Gloopy words:**

Discuss with your group what might be going on here.
(Space for some answers):

(d) Malapropisms
Psychologists interested in language production (speaking) often rely on errors to gain an insight into processing that is otherwise hard to investigate. In (i) – (iv) below (which are real or imagined) a wrong word was chosen. Write down the (presumably) intended word?
(i) You gotta have a few laughs to break the monogamy. (intended =                        )
(ii) … as headstrong as an allegory on the banks of the Nile. (intended =                        )
(iii) You could have knocked me over with a fender. (intended =                        )
(iv) The flood damage was so bad they had to evaporate the city. (intended =                        )

What can we say about the typical relationship between the “target (intended) word” and the “error word”?
(Space for some answers):

(e) Tongue twisters
Why is it harder to repeat “red lorry, yellow lorry” quickly, compared with “red car, yellow car”? What aspects of the form of the words do we need in an explanation?
(Space for some answers):

(f) Problem solving
Get your group to solve the following problem, the famous “Missionaries and Cannibals” problem. Three missionaries and three cannibals must cross a river using a boat which can carry at most two people, under the constraint that, for both banks, if there are missionaries present on the bank, they cannot be outnumbered by cannibals (if they were, the cannibals would eat the missionaries). The boat cannot cross the river by itself with no people on board.
Learning outcomes

These exercises should have shown you something of the complexity (and often the weirdness) of language processing, and of problem solving.

(1) Errors can be informative.
(2) The relevant dependent variables are often qualitative in nature.
(3) Sophisticated technology is not always necessary to start experimenting on psychological processing.
(4) Psychology experiments can often happen in more informal and/or group settings.
1. Language and Thinking lab

In this lab, you will be performing a version of one of the most famous and widely used tasks in all of experimental psychology, and which you will learning more about in Perception lecture 7. This type of task is usually called a 'Posner' task, after the Psychologist (Michael Posner) who invented it in the 1980s. The Posner task lets us study how we move our attention around to different parts of visual space. Note that, in this task, we are particularly interested in how you move your visual attention without moving your eyes themselves, so it is important that you try to follow the instruction to keep your eyes still when you are performing this task.

The task is really simple. You are required to stare at (fixate) the dot in the centre of a diamond in the middle of the screen, and visually monitor (without moving your eyes) the boxes on either side, trying to spot a small target dot appearing in either of these boxes. As soon as you see the dot appear you must press <spacebar> on the keyboard. This is a simple detection task – you are pressing <spacebar> to report that you have detected the target. The computer program running this task is called E-Prime, which is a widely-used piece of software for making psychology experiments. On every trial, E-prime will measure how many milliseconds it takes you to press <spacebar> after the dot appears. This is your Reaction Time (RT) to detect the target.

There are two versions of this task: ENDOGENOUS and EXOGENOUS.

In the ENDOGENOUS task, Eprime has been programmed to help you detect the target dot, by giving you a clue about which box it will appear in on each trial. We call this clue a CUE. In the ENDOGENOUS task, the cue is a line that will appear, on one or other side, within the central diamond, shortly before the target appears. Most of the time (on 8 out of every 10 occasions), the target will appear in the box on the same side as the cue; only on 2 out of every 10 occasions will the target appear in the box on the un-cued side. So, this cue will quite reliably tell you where to expect the target, and you should therefore take notice of it to perform the task well. When the target appears in the box on the same side of the cue, we can say the cue was VALID. When it appears in the box on the other side, we can say the cue was INVALID. On some other trials, the cue will be on both sides of the central diamond, and this gives you no useful information about where to expect the target. In this case, we can say the cue was NEUTRAL.

In the EXOGENOUS task, every target is preceded by an event, which is usually the brightening of one of the target boxes. This CUE is completely uninformative, the target is equally likely to appear in either box regardless of which box is brightened. There are also trials in which the cue is a brightening of the central diamond, and this tells you nothing useful at all about where the target is likely to appear. Because these cues are completely uninformative, you should just ignore them as best you can. However, we can still class the cue as being VALID when it is a brightening of the box in which the target does appear, as being INVALID when it is a brightening of the box in which the target does not appear, and as being NEUTRAL when it is a brightening of the central diamond, in which no target ever appears.

After each 'trial' (i.e. target dot and detection response), there will be another trial very similar to it. The task will be very repetitive, and you need to keep your attention on the task throughout the whole block. It may feel a bit boring - this is what a psychology experiment is often like for the participant. Unless you do your best to concentrate on pressing <spacebar> as soon as you see the dot on every trial, then your results may not be very meaningful.
ENDOGENOUS TASK

1. Stare at (fixate) the dot in the centre, and monitor the side boxes visually.

2. A cue will appear in the central diamond. In this example it indicates that the target will probably appear in the box on the left.

3. Shortly after, the target appears. In this example, it appears in the left box, as the cue predicted, so the cue was valid.

4. Press <spacebar> as soon as you see the target; get ready for the next trial.
EXOGENOUS TASK

1. Stare at (fixate) the dot in the centre, and monitor the side boxes visually.

2. A box, or sometimes the central diamond will brighten, but this tells you nothing about where the target will appear, so you should just ignore it.

3. Shortly after, the target appears. In this example, it appears in the left box, so the cue was invalid.

4. Press <spacebar> as soon as you see the target; get ready for the next trial.
Lab instructions – please read carefully

1. Work in pairs. Within each pair, one student should perform one task, and the other should perform the other. It does not matter in which order you complete the tasks. Watch one another perform the task, so that you can appreciate the differences from the version that you completed.

2. Work at one of the computer terminals, booting into Windows. On the desktop, there should be a folder called POSNER. Inside it will be a file called ENDOGNEOUS, and a file called EXOGENOUS. Double click on one of these to open the experiment.

3. When the task starts, you will be asked to enter your matriculation number – enter just the numerical part of your matriculation number (i.e. do not include the ‘s’ at the start).

4. You will also be asked to enter a session number. Just enter ‘1’ at this point.

5. Follow the instructions onscreen carefully. Complete the entire task. This will take you about 10 minutes.

6. Before the program quits, you will see a feedback screen that will tell you your median RT for six conditions: LEFT NEUTRAL, LEFT VALID, LEFT INVALID, RIGHT NEUTRAL, RIGHT VALID, RIGHT INVALID. Copy these values carefully into your workbook, overleaf. The condition names refer to the side of the screen that the target appeared on (LEFT or RIGHT) and whether the cue was NEUTRAL, VALID, or INVALID.

7. Inside the POSNER folder, will be your complete results file, in the E-Prime format 'edat'. Please locate the results files for your pair. These will be titled something like 'ENDOGENOUS_9999999_1.edat' or 'EXOGENOUS_9999999_1.edat' where 9999999 is your matriculation number and 1 is the session number. Please email these two files to your Perception lecturer, Dr. Rob McIntosh, <r.d.mcintosh@ed.ac.uk>, who will compile and analyse the complete class results to present in the lecture.

8. Discuss and answer the questions on the pages overleaf.
RESULTS – copy your median RTs into these tables. For each task, work out the values for the AVERAGE column for yourself, and fill them in.

**ENDOGENOUS TASK**

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<th>LEFT TARGET</th>
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<td>VALID CUE</td>
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**EXOGENOUS TASK**

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**DISCUSSION QUESTIONS**

1. What does RT tell us about visual attention in this task? For instance, if the RT was shorter in one condition than another, what could we conclude about visual attention? Do you think we are justified in using RT to say something about visual attention? (space for answers)

2. Do you expect any major differences in the pattern of RTs for left and right targets? (space for answers)

3. Would you expect the RTs in the ENDOGENOUS task to be different in the NEUTRAL, VALID and INVALID cue conditions. What pattern would you expect, and why? (space for answers)

4. Does your prediction correspond to the results that you have obtained. If not, why do you think this is? Check with other students to see what their pattern of results was. (space for answers)

5. What about the EXOGENOUS task? Why would the cues make any difference here, considering that they were completely uninformative about where the target would appear. (space for answers)
6. You have been presented with just one median RT for each combination of target side and cue condition. However, another difference between different trials was that sometimes the target appeared very shortly after the cue (100 ms), and sometimes it appeared after a longer delay (200 or 300 ms). This delay period is known as the Cue-Target Onset Asynchrony (CTOA). Do you think that the pattern of results would change at all depending upon the CTOA or not? (space for answers)

7. In the graph showing the spread of RTs that you might typically get in a task like this one, the distribution is negatively skewed, meaning that there are lots of short RTs, but then a much longer flatter tail at the right side, indicating that on a few trials the RT was very high, maybe as high as 2000 milliseconds (i.e. 2 seconds). Sketch, below, what this graph would look like. What do you think might be happening to cause these very long RTs? (space for answers)

8. If we wanted a single number to represent your average reaction time in this task, then we calculate it in different ways. Two of the simplest ways are to calculate the arithmetic mean (the sum of all the RTs divided by the number of RTs), or to calculate the median (the middle value if we lined up all the RTs in order of size). Sketch a plausible-looking median and mean on your graph above. Which, if either, value do you think is likely to be the better reflection of your 'typical' behaviour in this task? (Clue: which one did Eprime calculate for you to enter into this workbook?)

Learning outcomes

(1) In this lab you saw how E-Prime can be used to present an experiment. E-Prime gives a psychological researcher complete control over the presentation of stimuli to a screen and the recording of the experimental subjects’ responses to those stimuli. On Learn you can see some screenshots of what E-Prime looks like “behind the scenes”, as the experimenter is programming it to do just what is required. This sort of programming isn’t real computer programming, with lines and lines of code; rather, it involves instructing e-prime to do certain things with certain commands and certain numbers within its internal set-up. You will see something of the great flexibility that electronic screens give us in terms of getting people to perform certain very simplified bits of perception and cognition. From these simple behaviours in very simplified tasks, psychologists hope to infer things about complex real-world behaviours.

(2) You also experienced a typical experiment on visual attention, from the experimental subject’s viewpoint. It’s always very important to appreciate the subject’s experience of the task, to give you an insight into the experimental technique. We recorded simple reaction times (RTs) – exactly how quickly (in milliseconds) you can make a response. You saw how even this piece of simple behaviour can allow us to make inferences about what is going on during perceptual and cognitive processing.

(3) You thought about the difference between the median and the mean.
3. Memory Lab

The details of this lab will be presented on Learn so as to preserve the novelty of the experimental stimuli.

Learning outcomes

(1) In this lab you saw how psychologists are able to use the internet to acquire data from human subject volunteers.

(2) You experienced some of the advantages of this approach and some of the disadvantages.

(Space for your responses and notes during the lab.)
4. Developmental Lab

We have a dedicated developmental psychology lab in 7 George Square, which is available for student projects in the fourth-year of the Psychology MA/BSc. We have good relations with local nurseries and parents and ready access to infant experiment participants. For the large Psychology 1 class we cannot use this facility for logistical reasons, but we will carry out some structured observations of films of the behaviour of infants. These films will be available for viewing on Learn, along with a list of behaviours for students to identify, and further instructions as to how you should code the relevant behaviours, below.

Learning outcomes

(1) In this lab you saw some of the surprising richness of infant behaviour.

(2) You appreciated how a corpus of relevant behavioural data can be accumulated in the form of a collection of filmed activity.

(3) You saw how the qualitative richness of the data can be made tractable by a coding procedure.

(4) You saw how a more reliable interpretation of the data can be achieved by having more than one coder, and by the coders discussing differences between their outputs.

(Space for your responses and notes during the lab.)
Study Skills Activities (Semester 2 only)

In addition to each tutorial you will be set short study skills tasks over each semester (see timetable). Some of these will need to be submitted in a specific tutorial for your tutor to check; others are for you to complete in your own time (see timetable and LEARN for specific details). Some of these activities will involve you carrying out a specific skill to help you prepare for the tutorial or assessment, and others are general skills with which you should be familiar. It is strongly recommended you complete the tasks below for success in your future studies. Please see LEARN for how-to guides for each task.

The tasks are as follows:

1) Critical analysis
   Critical analysis is a key skill that will be developed throughout your university career. You may find that feedback on your work says “more critical analysis required” or “more evaluation of sources”. This activity is designed to help you understand what is meant by critical analysis and help you to begin to develop these skills in your writing and thinking.

2) Self-evaluation
   To make the most out of your time at university, it’s important that you reflect on what you’ve done so far – congratulate yourself on the progress you’ve made, and acknowledge areas that still need some work. By now you will have your essay marks back from the first semester. This activity is designed to help you think about how you are doing and to create an action plan for the coming semester. This activity will be submitted to your tutor during the Perception tutorial.

3) Endnote
   Endnote is reference management software, which can help you keep track of references and bibliographies when writing essays and reports. It is not essential that you use this software (there are others available), but many students find it a useful resource and this activity is designed as an introduction to the software.

4) Writing an Abstract
   By now you will be familiar with the concept of an abstract in psychology research articles. An abstract should be a short concise summary of a piece of research designed to give the reader an overview of what to expect in the article and help them decide whether it is relevant to what they are looking for. This activity will help you begin to develop skills in abstract writing. You are required to write an abstract for a published piece of work (available on LEARN) and to bring this abstract to your Developmental Psychology tutorial, where you will be able to compare with the original abstract.
Guidelines for Psychology 1 Essays

Please note: The essay titles for semesters 1 and 2 are given on LEARN during Innovative Learning Week. The hand-in date and time for the essay in this semester is 20th March, 2.00pm.

An essay is a formal attempt to answer the question given. So much is obvious, but the question remains "how"?

Structure
Essay writing is essentially story-telling. A story normally has a beginning introducing the characters, a middle which develops their relationships and a conclusion tying all ends together. Thus with an essay, the introduction sets the ground, with descriptions of the basic area(s) to be covered and usually an outline of what the competing bodies of evidence will be. In the middle section or sections, these themes are developed, with details of experiments and, more importantly, the logic that determines how the experiment fits into the story. Although, as in a novel, new "characters" or twists in the logic of the story may be introduced, remember that these must also fit into the tale. There are few things more irritating in both a novel and a psychology essay than characters (or experiments) brought in with no explanation or clear reason.

The ending is more difficult and critical. Tying loose ends together is a common problem, often solved in an essay by saying that the conclusion is a bit of this and a bit of that; i.e., every explanation is both right and wrong. While this may well be so, it is a very weak ending. Try to demonstrate what bits are right and wrong, and how the components fit together to produce the final story.

For example, take an essay that centres around biological vs. social constraints on human behaviour. In some very real sense, both approaches or sides are correct. However, in many of the examples given it can be seen that whereas biological constraints may define the outline of the tale (or the ultimate cause), we can see that particular social or psychological structures have arisen that act as the immediate reason (or proximal cause). There are strong biological reasons for us not to marry close relatives, especially when population densities are low (increase in disease through recessive gene combinations, loss of 'hybrid vigour', etc.). What would a 'genetic constraint' on marrying close relatives be, though? One problem is to first recognize your close kin. Fox found that children reared closely together in Israeli kibbutzim did not intermarry even though they were not closely related. They had lived closely together as if they were one family, and the explanation that Fox put forward was that they thus recognized each other as close kin. Thus the biological need to prevent in-breeding is served by the social one of recognition of family members. The latter occurs when people live closely together, so the anthropologists are to some extent right when they say that kinship is a social, not biological, phenomenon. In order to make sense of the story, both explanations are needed, and we can describe the part played by each.

One area in which the essay and novel differ is in personal experience. It is very rare for the experience you have, either directly or second-hand, to be useful in answering scientific questions. This is especially dangerous in psychology, when every man or woman in the street (and the dog) has an opinion about the reasons others behave in the way they do. This is not to say that experience is useless, or that naïve observations are worthless. What it should do is lead us to ask the appropriate questions. For example, violent videos were found in the homes of the two boys who killed Jamie Bulger. A Tabloid reaction was "Ban these killer videos", but we don't even know if the boys watched them. Do other children in the area have such videos in the house? What was different about the home background or personality of the boys? Have other children gone close to committing similar crimes? These are all relevant questions which we need to ask, and should be raised by that observation.
Length
The expected length of the essay required is 1200 words, plus or minus 10%. Adherence to the stated word limits for coursework is one factor among a number of factors that are taken into account by examiners in deciding the overall mark. Whereas we do not apply an explicit algorithm to deduce marks for exceeding the word limit you should assume that there will be consequences for excessive length. Markers use their academic judgment in deciding on the overall mark. Word limits do not include title or reference list.

Scope
A common question asked is, "How much detail (experimental or otherwise) is needed?" The answer is, of course, it depends. Often an essay can be answered either by a surface skimming of lots of different material, or by an in depth analysis of a small area. Clearly the detail required in the second is much larger than the first. In the first case the answer will centre on the logic of the results obtained, described very broadly. Of course, there may be instances where it is the detail of the experiment that must be used to show the crucial flaws in an argument. Here the detail needs to be given.

Sources
The common sources for an essay are: a) lectures and handouts; b) the course text; c) other books or articles that lecturers may refer to in handouts or in lectures and d) other sources that you may find for yourself (e.g. by searching Google Scholar using keywords or by following up some of the relevant references from the course textbook). Please note that you should use lectures and handouts (and ideally, introductory textbooks) as a method of tracking down relevant material, rather than citing them directly. You should not reference lecture notes or handouts in an essay. You can find sources mentioned in lectures and handouts by using search engines such as Google Scholar, and Web of Knowledge (instructions on how to use these will be available on LEARN). Wikipedia is not an acceptable academic source.

References
Whenever you refer to previous work in the text, you must credit the source of the information, e.g. "Eysenck (1965) has suggested..." or "It has been suggested that extraverts are less cortically aroused than introverts (Eysenck, 1965)".

If you quote directly from a source, then the quotation must be in inverted commas and you must give the relevant page number, e.g. (Eysenck, 1965, p.25).

Then, on a separate sheet headed “References” at the end your essay, you should list (in alphabetical order by author’s surname) all of the sources you have referred to in the text using the following formats:

Journal Articles:
NB: even if you read the article online, you should provide the formal reference rather than the webpage.
Chapter in Book:

Book:
The above examples are given to illustrate different reference formats depending on the publication source. However, the Reference section of your report should not be sub-titled. Don't forget, only references you have mentioned in your report should be included.

Primary and secondary sources:
The primary source is the publication in which an empirical study was originally reported or a particular theory was first advanced. A secondary source is a publication that gives a second-hand (and usually selective) account of work that has previously been published elsewhere. For example, if you read a summary in Martin, Carlson & Buskist’s textbook of the findings from a study that Bloggins carried out and published in a journal article, then the Bloggins article would be the primary source and the Martin, Carlson & Buskist textbook would be your secondary source. In your essay, you should reference both sources in the text using the following format: e.g. “Bloggins (1972) cited in Martin, Carlson & Buskist (2007)”. For the purposes of Psychology 1 essays, you need only provide the details of the secondary source in the reference list at the end of your essay. Of course, if you have actually managed to get hold of and read the primary source, then you should refer just to that (in both the text and the reference list). The reason why it is important to refer to primary sources is that it shows you are drawing on scientific studies that have been published in the scientific literature, rather than relying on anecdote or personal experience. Remember that a crucial feature of an essay in psychology is that it must consist of a piece of coherently argued scientific writing. It is not a piece of journalism, so do not adopt an informal or journalistic style. Instead, refer to scientific evidence and make this explicit by citing appropriate sources.
Appendix 1: Preparation for tutorials

THE PSYCHOLOGY JOURNAL ARTICLE

Journal articles in psychology have a standard format which simplifies the task of readers, editors, and referees in picking out the essential information quickly. Some journals depart from this format, for instance placing the Methods section at the very end of the article rather than after the Introduction, or requiring that the article is written as a whole, using connected text, as you would find in a newspaper. The standard format, however, is very widely used, and next year you will be using it to write up your practical work.

The standard format has the following components, in this order

• Title
• Abstract
• Introduction
• Methods
• Results
• Discussion
• (Conclusion)
• References
• (Appendix)

N.B. Not all of the articles above follow this format, some may be review article or essay type articles. However, this is the structure of a typical research article in psychology. You can use the form below as a guide to help prepare for your tutorials.

Template for analysing research papers

2) What is the area that is being addressed?
3) What are the main points or arguments the authors make in the article?
4) How do the authors set up the area as an important area of study?
5) What is the main methodology and technique used in the study?
6) What was the sample size?
7) What were the main findings of the research?
8) How do these findings relate to the main argument of the article?
9) Can the results be interpreted in any other ways?
10) What are the key inferences and conclusions the authors make?
11) How can the result of the study be applied in real world situations?
12) What are your opinions on the article?

In short:

What did they do?
Why did they do it?
What did they find?
What does it mean?
